

## United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO. FILING DATE FIRST NAMED INVENTOR ATTORNEY DOCKET NO. CONFIRMATION NO. 10/098,688 03/15/2002 Shunpei Yamazaki - SEL 308 5173 **EXAMINER** COOK, ALEX, MCFARRON, MANZO, CHEN, BRET P CUMMINGS & MEHLER, LTD. ART UNIT PAPER NUMBER Suite 2850 200 West Adams St. 1762 Chicago, IL 60606 DATE MAILED: 09/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

1. ☑ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:  a) ☑ The period for reply expires ②months from the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expires and (1) to Month's form the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expires that than SIX MONTHS from the mailing date of the final rejection, whichever is later. In no event, however, will the statutory period for reply expirely to the CEV (B) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).  Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee have been filed is the date for for reply experience of the entire date of the shorten date of the filed fee action, or (2) as set forth in (b) above, if checked. Any reply received by the Office attent three months after the mailing date of the final rejection, even if timely filed active any appropriate extension fee have been filed. Th		Application No.	Applicant(s)	
B. Chen  1762  -The MAILING DATE of this communication appears on the cover sheet with the correspondence address THE REPLY FILED 05_bity 2005 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.  1. ☑ The reply was flied after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, aftidavit, or other evidence, which places the application in condition for allowance, (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41,31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be flied within one of the following lime periods:  a) ☑ The period for reply expires 2_months from the mailing date of the final rejection.  b) ☐ The period for reply expires 2_months from the mailing date of the final rejection.  Examine Mole; If bot is beneful, and the state of the final rejection.  Examine Mole; If bot is beneful, and the state of the final rejection with the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.  Examine Mole; If bot is beneful or period for reply expire later box (a) or (b). DNY. CHECK BOX (b) WHEET THE IRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION See MFEP 760.07(b).  Extensions of time may be obtated under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee under 37 CFR 1.136(a). The state of fining the period of extensions and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.136(a).  CER 1.176(b) Any reply received by the Office later than throw months after the mailing date of the final rejection, went if the final rejection, even if the final rejection will be sente	Advisory Action	10/098,688	YAMAZAKI ET AL.	
The MAILING DATE of this communication appears on the cover sheet with the correspondence address THE REPLY FILED 05_July 2005 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.  1. The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance, (2) a Notice of Appeal (1) an ompliance mith 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:  a) The period for reply expires _months from the mailing date of the final rejection.  b) The period for reply expires _months from the mailing date of the final rejection.  Examiner Note: If thos 1 is checked, check either box (a) or (6). DNIY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS for THE FINAL REJECTION. See MFEP 760.07(0).  Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extensions and the corresponding amount of the fee. The appropriate extension fee have been filed is the date for purposes of determining the period of statistics and the corresponding amount of the fee. The appropriate extension fee have been filed is the date for purposes of determining the period of statistics and the corresponding amount of the fee. The appropriate extension fee have been filed a bridge date of the file of filed period of the fee. The appropriate extension fee have been filed as the date for purposes of appeal (37 CFR 1.136(a)). The proposed amendment of the fee. The proposed amendment (a) and the corresponding amount of the fee. The appropriate extension fee have the filed within the mailing date of the final rejection, own if tim	Before the Filing of an Appeal Brief	Examiner	Art Unit	
THE REPLY FILED 05 July 2005 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.  1. The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely life one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 1.31; or (3) a Request for Confluence Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:  a) The period for reply expires 2 months from the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire teat than SIX MONTHS from the mailing date of the final rejection. Examiner Note: If box 1 is checked, check either box (a) or (b) ONLY CHECK BOX (b) WHEN THE FIRST REPLYWAS FILED WITHIN TWO MONTHS OF THE FIRM, REPLECTION. See WIEP 765.070.  Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed in the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee have been filed in the different (f) the security of the security of the date of the filed of the filed appropriate extension fee have been filed in a filed for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee have been filed and provided the substitution of the date of filing and provided and the filed and the filed within two months of the date of filing a brief within two months of the date of filing a brief, will may be a filed on the filed within two months of the date of filing a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 C		B. Chen	1762	
1. So The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affdavit, or or evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31, or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:  a) The period for reply expires 3 months from the mailing date of the final rejection.  b) The period for reply expires 2 months from the mailing date of the final rejection.  The period for reply expires 2 months from the mailing date of the final rejection.  Examiner Note: If Not is checked, check when box (a) or (b). ONLY CHECK ROX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FIRAL REJECTION. See MPEP 705.07(f).  Extensions of time may be obtained wind 37 CFR 1.136(s). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee have been filed is the date for purposes of determining the period of file filed within the filed within the filed within two months of the date of filing a the filed within two months of the date of filing the Notice of Appeal with a filed within two months of the date of filing the Notice of Appeal and See filed within two	The MAILING DATE of this communication appears on the cover sheet with the correspondence address			
this application, applicant must limely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance, with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:  a) The period for reply expires 3 months from the mailing date of the find rejection.  b) The period for reply expires 2 months from the mailing date of the find rejection. Whichever is later. In no event, however, will the statution period for reply expires on: (1) the mailing date of the find rejection. Examine Note: (1) for its checked, check either box (a) or (5) ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See IMPEP 768.07(f).  Extensions of time may be obtained under 37 CFR 1.136(s). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension for the may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension for the been filed is the date for purposes of determining the period of extension and the corresponding amount of the fice. The appropriate extension for habour, or CFR 1.136(a) and the appropriate extension for the been filed is the date for purposes of determining the period of extension and the corresponding amount of the fice. The appropriate extension for the short propriate obtains only the solution of the filed. The propriate and the purpose of determining the period of extension and the corresponding amount of the file. The filed purpose of determining the period of extension and the corresponding amount of the filed. The short propriate activation of the extension and the second of the filed within the order of the filed within two months of the date of filing a brief, will not be entered because of filing the Notice of Appeal has been filed, any reply must be file	THE REPLY FILED <u>05 July 2005</u> FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.			
7. For purposes of appeal, the proposed amendment(s): a)  will not be entered, or b)  will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.  The status of the claim(s) is (or will be) as follows:  Claim(s) allowed:  Claim(s) objected to:  Claim(s) rejected:  Claim(s) withdrawn from consideration:  AFFIDAVIT OR OTHER EVIDENCE  8.  The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).  9. The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing a good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).  The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.  REQUEST FOR RECONSIDERATION/OTHER  11. The request for reconsideration has been considered but does NOT place the application in condition for allowance because: of the reasons listed.  12. Note the attached Information Disclosure Statement(s). (PTO/SB/08 or PTO-1449) Paper No(s)	The MAILING DATE of this communication appears on the cover sheet with the correspondence address THE REPLY FILED 05 July 2005 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.  1. ☑ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:  a) ☑ The period for reply expires 3 months from the mailing date of the final rejection.  b) ☐ The period for reply expires 3 months from the mailing date of the final rejection.  Examiner Note: [15 box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 708.07(f).  Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).  NOTICE OF APPEAL  2. ☐ The Notice of Appeal was filed on A brief in compliance with 37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal (37 CFR 41.37(a)). or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal.			
Claim(s) objected to:	7. For purposes of appeal, the proposed amendment(s): a) will not be entered, or b) will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.  The status of the claim(s) is (or will be) as follows:			
13. Other:	Claim(s) rejected: Claim(s) withdrawn from consideration:  AFFIDAVIT OR OTHER EVIDENCE  8.  The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).  9.  The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing a good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).  10. The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.  REQUEST FOR RECONSIDERATION/OTHER  11. The request for reconsideration has been considered but does NOT place the application in condition for allowance because: of the reasons listed.			

Application/Control Number: 10/098,688

Art Unit: 1762

The Request for Reconsideration dated 7/5/05 has been considered but are not deemed persuasive for the reasons listed below.

The new matter rejection concerning circulating from the downstream for claims 46-57, 74-67, 81-83, 88-110 has been withdrawn.

Applicant next argues that the new matter rejection with respect to the heat absorber 1104 around the heat generating means 1102 is supported (p.3).

The examiner disagrees. While Figure 1 shows a heat absorber surrounding a heat generating means 1102, it should be noted that nowhere in the Figure or the specification does it recite "covering" the heat generating means.

Applicant next argues that the new matter rejection with respect to the pores in the orifice plate is supported (pp.3-4).

The examiner disagrees. Pores are defined as "a minute opening esp. in an animal or plant; "one by which matter passes through a membrane" (Merriam-Webster's Collegiate Dictionary, p.907, 1997). There appears to be no support in Figure 1 or the specification which discusses pores.

The new matter rejection concerning sheet processing for claims 97-103 has been withdrawn.

The new matter rejection concerning a heater in the upstream size for claim 104 has been withdrawn.

Applicant next argues that Hemsath fails to teach a gas provided on the upside a substrate surface (p.6).

The examiner disagrees. This issue has been addressed in the previous office action.

Applicant argues that having a heat absorber covering the heat generating means produces a remarkable effect by absorbing radiant light (p.6).

The examiner agrees in part. While it may have a remarkable effect, it is noted that the claims as presently recited do not limit a heat generating means which produces radiant light. Hence, the applicant's arguments are not commensurate in scope with the instant claims. If the applicant were to limit the claims to recite same, the examiner would withdraw this portion of the rejection.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to B. Chen whose telephone number is (571) 272-1417. The examiner can normally be reached on 7:30am - 4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy Meeks can be reached on (571) 272-1423. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Bc 8/29/05

BRET CHEN
PRIMARY EXAMINER